PART 1 GENERAL

1. RELATED DOCUMENTS
   1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
2. SUMMARY
   1. Section Includes:
      1. Metal Wall Panel Systems and Components
   2. Related Sections / Work:
      1. Sections 05 40 00 – Cold-Formed Metal Framing
      2. Sections 09 20 00 – Plaster and Gypsum Board
      3. Sections 09 50 00 – Acoustical Ceilings
      4. Sections 09 90 00 – Paintings and Coatings
      5. Division 23 – Heating, Ventilating and Air Conditioning
      6. Division 26 – Electrical
   3. This Section covers the general requirements only for Metal Walls as shown on the drawings. The supplying and installation of additional accessory features and other items not specifically mentioned herein, but which are necessary to make a complete installation, shall also be included or clarified accordingly.
   4. Qualification Data**:**
      1. Data substantiating manufacturer and installer qualifications.
      2. Certified data attesting fire rated materials comply with specifications.
      3. Manufacturer’s Instructions: Detailed installation instructions and maintenance data.
3. REFERENCES
   1. American Society for Testing and Materials (ASTM)
      1. E 84 – “Standard Test Method for Surface Burning Characteristics of Building Materials”
      2. E 488 – “Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements”
      3. B 209 – “Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate”
      4. C 423 – “Sound Absorption and Sound Absorption Coefficients by Reverberation Room Method”
      5. A 653 – “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip process”
      6. E 1477 – “Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by use of Integrating-Sphere Reflectometers”
   2. LEED-CI 2009: Applicable LEED Environmental Categories and Credits and performance requirements as indicated in LEED for Commercial Interiors 2009:
      1. Material and Resources (MR)
         1. MRc4 – Recycled Content
         2. MRc5 – Regional Materials
         3. MRc7 – Certified Wood
      2. Indoor Environmental Quality (IEQ)
         1. IEQc4.1 – Low-Emitting Materials – Adhesives & Sealants
         2. IEQc4.2 – Low-Emitting Materials – Paints & Coatings
         3. IEQc4.4 – Low-Emitting Materials – Composite Wood & Agrifiber
         4. IEQpc24 – Acoustics
   3. LEED v4 ID+C: Applicable LEED v.4 Environmental Categories and Credits and performance requirements as indicated in LEED v4 for Interior Design + Coordination:
      1. EA Credit: Optimize Energy Performance
      2. MR Credit: Building Product Disclosure & Optimization – EPD
      3. EQ Credit: Low-Emitting Materials
      4. EQ Credit: Indoor Air Quality Assessment
      5. EQ Credit: Daylight
      6. EQ Credit: Acoustic Performance
4. SUBMITTALS
   1. Product Data: Manufacturer’s published literature, including specifications.
   2. LEED Submittal Data: Manufacturer’s product data for each product specified in this section per ecoscorecard.com.
   3. Product Certification: Manufacturer’s certifications that products comply with specified requirements and governing codes including product data, laboratory test reports and research reports showing compliance with specified standards.
   4. Shop Drawings: Submit shop drawings drawn to scale, and indicating penetrations and wall mounted items. Show the following details:
      1. Indicate metal wall layout, wall mounted items and penetrations.
      2. Panel thickness and finishes.
      3. Details of system assembly and connections to building components.
   5. Samples for Verification: Full-size units (or as specified below) of each type of wall assembly indicated; in sets for each color, texture, and pattern specified, showing the full range of variations expected in these characteristics. Submit samples for each type specified.
      1. 7” square metal panel units.
      2. 11” long samples of each exposed molding or trim, if required.
      3. 11” long samples of each suspension component, if required.
5. QUALITY ASSURANCE
   1. Manufacturer/Installer Qualifications:
      1. Provide metal wall system components produced by a single manufacturer with a minimum 5 years’ experience in actual production of specified products and with resources to provide consistent quality in appearance and physical properties, without delaying the work.
      2. Provide suspension system components produced by a single manufacturer to provide compatible components for a complete metal wall system installation.
      3. Perform installations using a firm with installers having no less than 3 years of successful experience on projects of similar size and requirements.
   2. Regulatory Requirements:
      1. Fire Rating Performance Characteristics: Install system to provide a flame spread of 0 - 25, complying with certified testing to ASTM E 84.
   3. Mock-Up: Prior to beginning installation erect a mock-up section, where directed, using all system components.
   4. Pre-installation Conference: Conduct a conference, prior to start of installation, to review system requirements, shop drawings, and all coordination needs.
6. DELIVERY, STORAGE AND HANDLING
   1. Deliver system components in manufacturer’s original unopened packages, clearly labeled.
   2. Store components in fully enclosed dry space. Carefully place on skids, to prevent damage from moisture and other construction activities.
   3. Handle components to prevent damage to surfaces and edges, and to prevent distortion and other physical damage.
7. PROJECT CONDITIONS
   1. Begin system installations only after spaces are enclosed and weather-tight, and after all wet work and overhead work have been completed.
   2. Prior to starting installations, allow materials to reach ambient room temperature and humidity intended to be maintained for occupancy.
8. WARRANTY
   1. Provide specified manufacturer’s warranty against defects in workmanship, discoloration, or other defect considered undesirable by the Architect or Employer.
   2. This warranty shall remain in effect for a minimum period of one (1) year from date of initial acceptance.
9. MAINTENANCE & EXTRA MATERIALS
   1. Maintenance Instructions: Provide manufacturer’s standard maintenance and cleaning instructions for finishes provided.
   2. Extra Materials as Required: Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents. Only typical system components are included with attic stock.
      1. Metal Wall Panel Units: Full-size units equal to two percent (2%) of amount installed.
      2. Wall Suspension System Components: Quantity of each z-rail and exposed component equal to two percent (2%) of amount installed.

PART 2 PRODUCTS

1. MANUFACTURER
   1. Provide Metal Wall System manufactured by Hunter Douglas Architectural Products, Inc., 5015 Oakbrook Parkway, Suite 100, Norcross, GA 30093, USA. (800) 366-4327
   2. Substitutions not permitted
2. SYSTEM MATERIALS
   1. Metal panel wall system for interior installations:
   2. Panel Profile Type: Formed ***(aluminum)(stainless steel)*** panel with square edges, factory-assembled with Z-rail clips.
      1. Pedestrian Level, preferred for panels within reach (e.g. up to 8' height):
         1. Panel Dimensions: ***(24" x 24")(24" x 48")(24" x 60")(24 x 72")(\_\_\_" x \_\_\_")***
         2. Panel Orientation: ***(Horizontal)(Vertical)***
         3. Thickness:
            1. Aluminum: ***(.063")(.090")(.125")***
            2. Stainless Steel: ***(20 ga)(16 ga)***
         4. Joint Style: ***(Closed joint)(Reveal, ¼")(Reveal, ½")***
      2. Acoustical Level, preferred for panels out of reach (e.g. above 8' height):
         1. Panel Dimensions: ***(24" x 24")(24" x 48")(24" x 60")(24 x 72")(\_\_\_" x \_\_\_")***
         2. Panel Orientation: ***(Horizontal)(Vertical)***
         3. Thickness:
            1. Aluminum: ***(.040")(.050")(.063")(.090")(.125")***
            2. Stainless Steel: ***(24 ga)(20 ga)(16 ga)***
         4. Joint Style: ***(Closed joint)(Reveal, ¼")(Reveal, ½")***
   3. Suspension System:
      1. Z-rail installed onto new substructure or existing walls; spacing determined by panel size. Hang factory-assembled wall panels from z-rail using panel z-clips.
      2. Metal wall panels are progressively demountable from the top downwards.
   4. Perforations:
      1. Standard perforations, see website: <https://www.hunterdouglasarchitectural.com/ceilings/walls/wallMetalWalls/index.jsp>
         1. Pedestrian Level: ***(Non-Perforated)(Perforation #\_\_\_\_\_)\****

\*Consult Hunter Douglas for perforation availability.

* + - 1. Acoustical Level: ***(Non-Perforated)(Perforation #\_\_\_\_\_)\****

\*Consult Hunter Douglas for perforation availability.

* + 1. Perforation border: Standard 3/8"
  1. Panel Finish
     1. Paint; color to be selected by architect
        1. Applied Polyester
        2. Powder Coat
        3. Decorated Wood-Look Powder Coat
     2. Stainless steel type 304 finishes:
        1. 2B Satin (7772C)
        2. #4 Brushed (7774C)
        3. #8 Polished (7778C)

1. ACCESSORY MATERIALS
   1. Trim – Finish: ***#\_\_\_\_\_\_\_\_\_\_\_\_\_***
      1. Inside Corner: ***(Square)(Round)***
      2. Outside Corner: ***(Square)(Round)***
      3. Top Trim
      4. Perimeter Trim
   2. Base, ***(aluminum)(stainless steel)*** – Height: ***(4")(6")*** Finish: ***#\_\_\_\_\_\_\_\_\_\_\_\_\_***
   3. Acoustic Material (Perforated Panels Only): ***(Non-woven black fabric)(Non-woven black fabric with 1” thick glass fiber, 1‑1/2 pcf density, enclosed in black polyethylene)(1” thick glass fiber, 1‑1/2 pcf density, enclosed in black polyethylene)***

PART 3- EXECUTION

1. EXAMINATION
   1. Examine substrates and structural framing to which metal panels attach or abut, with installer present, for compliance with requirements specified in this and other Sections that affect installation and anchorage, and other conditions affecting performance of metal panel walls.
   2. Proceed with installation only after unsatisfactory conditions have been corrected.
2. PREPARATION
   1. Survey substrate for wall attachment to assure squareness and proper elevation for wall panel installation.
3. INSTALLATION
   1. Install metal panel walls, per manufacturer's standard details or shop drawings provided, per manufacturer's written instructions, and to comply with local building code requirements.
   2. Remove protective film from panels only when space is completely clean and free of airborne particles. Use white cotton gloves for final installation of panels onto suspension system.
4. ADJUST AND CLEAN
   1. Adjust components to provide uniform tolerances.
   2. Replace all wall panels that are scratched, dented or otherwise damaged.
   3. Clean exposed surfaces with non-solvent, non-abrasive commercial type cleaner.

**End of Section**